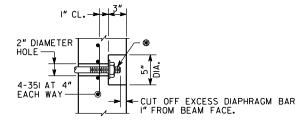
## NOTES

- I. BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 7'-9" FROM THEIR ENDS. DISREGARDING THIS REQUIREMENT COULD LEAD TO COLLAPSE OF THE BEAM. PICK-UPS SHALL BE EMBEDDED TO WITHIN 4" OF THE BOTTOM OF THE BEAM. DETAILS OF PICK-UPS SHALL BE INCLUDED IN THE SHOP DRAWINGS.
- 2. CHAMFER EDGES OF BEAMS 1/2", 3/4" OR 1".
- 3. HORIZONTAL DIMENSIONS ARE IN PLACE DIMENSIONS. THE BEAM LENGTH INCLUDES THE 1/8" EPOXY MORTAR AT EACH END. SHOP DRAWINGS SHALL ADJUST HORIZONTAL DIMENSIONS FOR GRADE AND FABRICATION EFFECTS SUCH AS SHRINKAGE AND ELASTIC SHORTENING.
- 4. AT Q BEARING, FORM A 1 $\frac{1}{4}$ " DIAMETER X 7" DEEP HOLE AT THE FIXED ENDS AND A 6" X 1 $\frac{1}{4}$ " X 7" DEEP SLOT AT THE EXPANSION ENDS FOR A 1 $\frac{1}{2}$ " DIAMETER SMOOTH DOWEL. SEE PLAN AND ELEVATION SHEET FOR LOCATION OF FIXED AND EXPANSION ENDS.
- 5. TOPS OF BEAMS SHALL BE ROUGH FLOATED AT APPROXIMATELY THE TIME OF INITIAL SET. ENTIRE TOP SHALL BE SCRUBBED TRANSVERSELY WITH A COARSE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A ROUGHENED SURFACE FOR BONDING TO THE SLAB. ROUGHENED SURFACE SHALL HAVE AN AMPLITUDE OF APPROXIMATELY 1/4". CONCRETE FINS OR PROJECTIONS SHALL BE REMOVED TO PRODUCE A VERTICAL FACE AT THE EDGE OF THE BEAM.
- 6. ALL HOLES FORMED INTO THE BEAMS TO FACILITATE TRANSPORT SHALL BE FILLED AND GIVEN A TYPE I FINISH, PRIOR TO ACCEPTANCE OF THE BEAM. REMOVE PVC OR SIMILAR FORMING MATERIALS FROM EACH HOLE, EXPOSING THE CONCRETE SURFACE. COAT INTERIOR OF HOLE WITH A TYPE II EPOXY RESIN ADHESIVE IN ACCORDANCE WITH GEORGIA STANDARD SPECIFICATION 886 AND FILL WITH A RAPID SETTING PATCHING MATERIAL IN ACCORDANCE WITH GEORGIA STANDARD SPECIFICATION 934.
- 7. NON-COMPOSITE DEAD LOAD DEFLECTION (ANC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF THE SLAB AND COPING.
- 8. COMPOSITE DEAD LOAD DEFLECTION (AC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF BARRIER.
- 9. STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270.
- IO. PRESTRESSING DATA IS AS FOLLOWS:
  - A. USE XX 0.6" DIAMETER LOW-RELAXATION (A = 0.217 SQ IN) STRANDS. PRETENSION TOP FOUR (4) STRANDS TO 10,000 LBS EACH. PRETENSION BOTTOM STRANDS TO 43,943 LBS
  - B. PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (fci) OF X,XXX PSI.
  - C. INCLUDING THE TOP STRANDS, THE TOTAL JACKING FORCE OF PRETENSIONING IS X,XXX,XXX LBS.
  - D. INCLUDING THE TOP STRANDS, THE NET PRESTRESSING FORCE OF THE STRANDS AFTER ALL LOSSES IS XXX,XXX LBS.
- II. CONCRETE STRENGTH (fc) = X,XXX PSI.
- 12. ALLOWABLE PSC BEAM TENSION = XXX PSI.



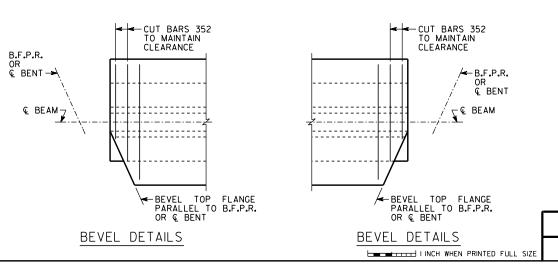
₱ DIAPHRAGM BAR SHALL BE A I" DIAMETER PLAIN BAR, THREADED 5" ON EACH END, WITH  $\frac{1}{4}$ " X  $\frac{3}{2}$ " DIAMETER WASHERS AND HEX NUTS (ASTM A 709 GRADE 36).

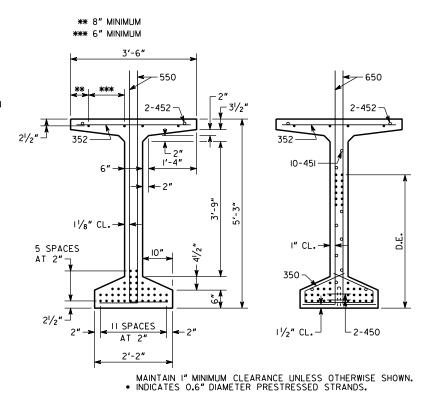
TIGHTEN DIAPHRAGM BAR AS PER SUB-SECTION 507.3.05.C OF THE GEORGIA DOT SPECIFICATIONS.

AFTER EXCESS DIAPHRAGM BAR HAS BEEN CUT OFF, PAINT DIAPHRAGM BAR, WASHER, AND NUT EXPOSED IN RECESS WITH SPECIAL PROTECTIVE COATING NO. 2 P AS PER SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS. AFTER PAINTING, FILL THE RECESS WITH AN APPROVED EPOXY GROUT.

GALVANIZING OF THE DIAPHRAGM BAR AS PER SUB-SECTION 865.2.01.B.12 OF THE GEORGIA DOT SPECIFICATIONS IS NOT

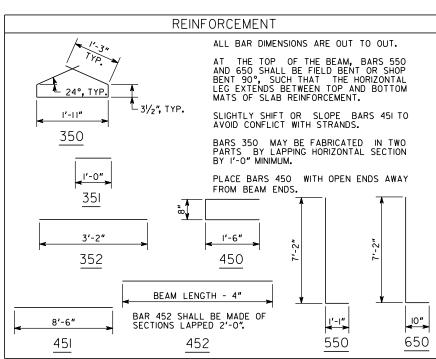
RECESS DETAIL FOR DIAPHRAGM BAR ENDS

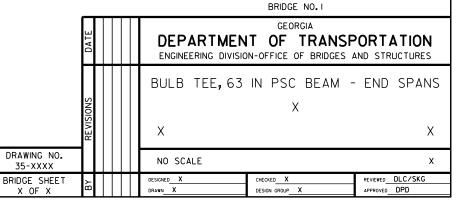




SECTION AT MIDPOINT

SECTION AT END





\* AT CONTRACTOR'S OPTION, WHERE A RECESS IS NOT REQUIRED, A 3" DIAMETER HOLE MAY BE USED.

\*\*AT CONTRACTOR'S OPTION, WHERE A RECESS IS NOT REQUIRED, A 3" DIAMETER HOLE MAY BE USED.

\*\*AT CONTRACTOR'S OPTION, WHERE A RECESS IS NOT AT 4"

\*\*AT CONTRACTOR'S OPTION, WHERE A RECESS IS NOT AT 4"

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\*\*AT CONTRACTOR'S OPTION, WHERE A RECESS IS NOT AT 4"

\*\*AT 4"

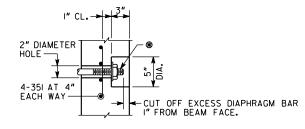
\*\*AT 6"

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## ELEVATION

## NOTES

- I. BEAMS SHALL BE MAINTAINED IN AN UPRIGHT POSITION AT ALL TIMES AND SHALL BE PICKED UP WITHIN 7'-9" FROM THEIR ENDS. DISREGARDING THIS REQUIREMENT COULD LEAD TO COLLAPSE OF THE BEAM. PICK-UPS SHALL BE EMBEDDED TO WITHIN 4" OF THE BOTTOM OF THE BEAM. DETAILS OF PICK-UPS SHALL BE INCLUDED IN THE SHOP DRAWINGS.
- 2. CHAMFER EDGES OF BEAMS 1/2", 3/4" OR I".
- 3. HORIZONTAL DIMENSIONS ARE IN PLACE DIMENSIONS. THE BEAM LENGTH INCLUDES THE 1/8" EPOXY MORTAR AT EACH END. SHOP DRAWINGS SHALL ADJUST HORIZONTAL DIMENSIONS FOR GRADE AND FABRICATION EFFECTS SUCH AS SHRINKAGE AND ELASTIC SHORTENING.
- 4. AT  $\mathbb C$  BEARING, FORM A 1 $\frac{3}{4}$ " DIAMETER X 7" DEEP HOLE AT THE FIXED ENDS AND A 6" X 1 $\frac{3}{4}$ " X 7" DEEP SLOT AT THE EXPANSION ENDS FOR A 1 $\frac{1}{2}$ " DIAMETER SMOOTH DOWEL. SEE PLAN AND ELEVATION SHEET FOR LOCATION OF FIXED AND EXPANSION ENDS.
- 5. TOPS OF BEAMS SHALL BE ROUGH FLOATED AT APPROXIMATELY THE TIME OF INITIAL SET. ENTIRE TOP SHALL BE SCRUBBED TRANSVERSELY WITH A COARSE BRUSH TO REMOVE ALL LAITANCE AND TO PRODUCE A ROUGHENED SURFACE FOR BONDING TO THE SLAB. ROUGHENED SURFACE SHALL HAVE AN AMPLITUDE OF APPROXIMATELY 1/4". CONCRETE FINS OR PROJECTIONS SHALL BE REMOVED TO PRODUCE A VERTICAL FACE AT THE EDGE OF THE BEAM.
- 6. ALL HOLES FORMED INTO THE BEAMS TO FACILITATE TRANSPORT SHALL BE FILLED AND GIVEN A TYPE I FINISH, PRIOR TO ACCEPTANCE OF THE BEAM. REMOVE PVC OR SIMILAR FORMING MATERIALS FROM EACH HOLE, EXPOSING THE CONCRETE SURFACE. COAT INTERIOR OF HOLE WITH A TYPE II EPOXY RESIN ADHESIVE IN ACCORDANCE WITH GEORGIA STANDARD SPECIFICATION 886 AND FILL WITH A RAPID SETTING PATCHING MATERIAL IN ACCORDANCE WITH GEORGIA STANDARD SPECIFICATION 934.
- 7. NON-COMPOSITE DEAD LOAD DEFLECTION (ANC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF THE SLAB AND COPING.
- 8. COMPOSITE DEAD LOAD DEFLECTION (ΔC) AT THE MIDPOINT IS DUE TO THE WEIGHT OF BARRIER.
- 9. STRANDS SHALL MEET ALL REQUIREMENTS OF ASTM A 416 GRADE 270.
- IO. PRESTRESSING DATA IS AS FOLLOWS:
  - A. USE XX 0.6" DIAMETER LOW-RELAXATION (A = 0.217 SQ IN) STRANDS. PRETENSION TOP FOUR (4) STRANDS TO 10,000 LBS EACH. PRETENSION BOTTOM STRANDS TO 43,943 LBS EACH.
  - B. PRETENSIONED STRANDS SHALL BE RELEASED AFTER THE CONCRETE HAS REACHED A MINIMUM STRENGTH (  $f_{ci}$  ) OF X,XXX PSI.
  - C. INCLUDING THE TOP STRANDS, THE TOTAL JACKING FORCE OF PRETENSIONING IS X,XXX,XXX LBS.
  - D. INCLUDING THE TOP STRANDS, THE NET PRESTRESSING FORCE OF THE STRANDS AFTER ALL LOSSES IS XXX,XXX LBS.
- II. CONCRETE STRENGTH (fc) = X,XXX PSI.
- 12. ALLOWABLE PSC BEAM TENSION = XXX PSI.



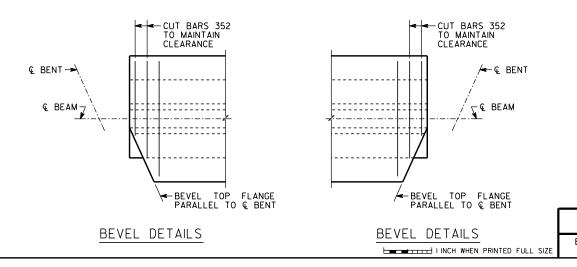
® DIAPHRAGM BAR SHALL BE A I" DIAMETER PLAIN BAR, THREADED 5" ON EACH END, WITH  $\frac{1}{4}$ " X  $3\frac{1}{2}$ " DIAMETER WASHERS AND HEX NUTS (ASTM A 709 GRADE 36).

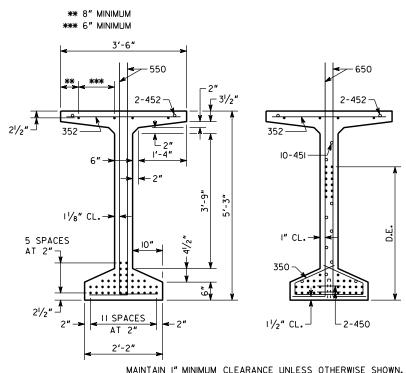
TIGHTEN DIAPHRAGM BAR AS PER SUB-SECTION 507.3.05.C OF THE GEORGIA DOT SPECIFICATIONS.

AFTER EXCESS DIAPHRAGM BAR HAS BEEN CUT OFF, PAINT DIAPHRAGM BAR, WASHER, AND NUT EXPOSED IN RECESS WITH SPECIAL PROTECTIVE COATING NO.2 P AS PER SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS. AFTER PAINTING, FILL THE RECESS WITH AN APPROVED EPOXY GROUT.

GALVANIZING OF THE DIAPHRAGM BAR AS PER SUB-SECTION 865.2.01.B.I2 OF THE GEORGIA DOT SPECIFICATIONS IS NOT REQUIRED.

## RECESS DETAIL FOR DIAPHRAGM BAR ENDS

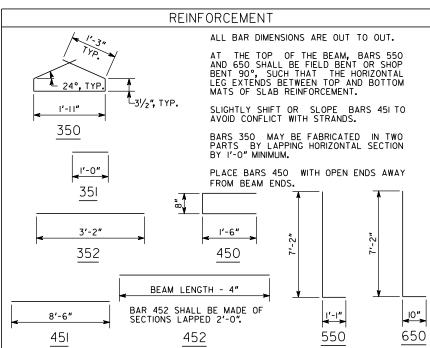


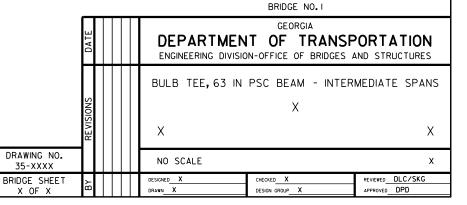


MAINTAIN I" MINIMUM CLEARANCE UNLESS OTHERWISE SHOWN.
• INDICATES 0.6" DIAMETER PRESTRESSED STRANDS.

SECTION AT MIDPOINT

SECTION AT END





TEMPLAT

bulb63.dar